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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,137	03/03/2005	Picerrick Girard	3952-75	2456
23117 7590 08/09/2007 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER PALO, FRANCIS T	
			ART UNIT 3644	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/524,137	Applicant(s) GIRARD ET AL.	
	Examiner Francis T. Palo	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 and 24-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 21-23 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/7/05, 7/13/05</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of claims 1-4, 7-10, 15, 16, 21-23 and 27-29 in the reply filed on 4/27/07 is acknowledged.

**Claims 11-20 and 24-26** are **withdrawn** from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Further, **claims 15, 16, 27 and 28** are directed to a non-elected invention or species and are **withdrawn** from further consideration pursuant to 37 CFR 1.142(b).

Election was made without traverse in the reply filed on 4/27/07.

### *Claim Rejections - 35 USC § 112*

**Claim-1** and those depending therefrom are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "support" as recited in the claims is unclear and applicant is urged to utilize a more conventional structural descriptive such as a "web" or some other structural language to describe the invention.

**Claim-7** recites the limitation "fixing points"; there is insufficient antecedent basis for this limitation in the claim.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a).

The drawings must show every feature of the invention specified in the claims. Therefore, the "**fixing points** of the support", as recited in **claim-7**, must be shown (to facilitate an understanding of the relationship of the grid) or the feature(s) canceled from the claim(s).

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended."

If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-3 and 21** are rejected under 35 U.S.C. 103(a),  
as being unpatentable over **Weber** (EP 454104 A1) 1991.

Regarding **claims 1-3 and 21**:

Weber teaches a biodegradable latex-treated cellulose web (support) wherein the support can contain **natural and/or synthetic fibers** (abstract), but does not specifically mention thermo-bonding polylactic acid (PLA) fibers as claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made, to have substituted a synthetic polymer in combination with the cellulose mass of biodegradable fibers of Weber, such as those derived from PLA, as Weber teaches synthetic fiber can be utilized in the biodegradable fibrous mass, and it is well known to use PLA derived polymers for plant protection and for mulching applications (see Ehret US 5,783,504), as these PLA materials are well known and utilized for their biodegradable characteristics, and further, such modification is merely an alternate functionally equivalent mulching material performing the same intended function of providing biodegradable characteristics to a degradable mulch.

And in view of the guidance provided by the Supreme Court in *KSR*; all the claimed elements were known in the prior art (that is, the use of PLA derived materials for use such as for mulching, especially for their biodegradability, and the teaching of substituting synthetic fibers for natural fibers suitable for use as a fibrous support mulching material), and one skilled in the art could have combined the elements in the weight ranges as claimed by known methods with no change in their respective functions (biodegradability and improved tear strength), and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

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**Claims 4-10, 22, 23 and 29** are rejected under 35 U.S.C. 103(a),  
as being unpatentable over **Weber 104** as applied to claim-1 above,  
and further in view of **Anton** (SI 9600317 A2) 1998..

Regarding **claims 4 and 5**:

The discussion above regarding claim-1 is relied upon.

Weber is silent as to a grid associated with at least part of the support as claimed.

**Anton '317** teaches (abstract) an analogous soil mulch or support having a textile (threads as claimed) or net cover (**grid**) that can be placed on one or two sides of the support (see abstract and figure-1), and as both Weber and Anton teach supports or webs of organic fiber for soil mulching; it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Weber to include a cover as taught by Anton for the known advantages as taught by Anton, specifically to strengthen the web or support.

Further, Anton (in the absence of a translation) teaches a textile or net made of jute as the cover, and as jute is utilized to make twine and jute twine is an equivalent to modified viscose as claimed (viscose read to encompass treated cellulose), then it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have modified Weber to include a grid made of viscose threads, as further such modification is merely an alternate functionally equivalent organic material performing the same intended function of a biodegradable and strengthening layer material.

Regarding **claim-6**:

The discussion above regarding claim-4 is relied upon.

Weber as modified, is silent as to the weight of the grid as claimed (in the absence of a translation of Anton).

In view of the guidance provided by the Supreme Court in *KSR*; the claim would have been obvious (that is, the weight range of the grid as claimed) because, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp to arrive at a grid weight for strengthening purposes, that would result in the weight range as claimed, and if this leads to the anticipated success, it is likely the product not of innovation, but of ordinary skill and common sense.

Regarding **claims 7, 9, 22 and 23**:

The discussion above regarding claim-4 is relied upon.

The grid (cover) of Weber as modified by Anton as depicted in figure-1 of Anton, is readable as, 'positioned" and "associated" as claimed.

Regarding **claims 8 and 29**:

The discussion above regarding claim-4 is relied upon.

Weber as modified teaches a needled grid or cover which is further spattered with latex, celluloid glue or another suitable binder, which is readable on the grid being glued directly on the surface of the fibrous support, and further, the glues recited in the claim are readable on other suitable binders as taught by Anton in the abstract,

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and the examiner takes official notice that the biodegradable glues as recited in claim-8 are well known in the art of mulching/mats for the well known advantages of that feature.

Further, In view of the guidance provided by the Supreme Court in *KSR*; the claim would have been obvious (that is, the weight of the glue as claimed) because, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp to arrive at a glue weight for adhesive and strengthening purposes, that would result in the weight as claimed, and if this leads to the anticipated success, it is likely the product not of innovation, but of ordinary skill and common sense.

Regarding **claim-10**:

The discussion above regarding claim-1 is relied upon.

Weber while teaching a natural fiber web (support) saturated with a latex solution is silent as to the use of a hydrophobic resin in the support, as claimed.

Applicant discloses the use of epichlorhydrin resin with a combination of deciduous and coniferous fibers (WO 01/25536) in a mulching product as admitted prior art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added a hydrophobic resin as claimed and as taught by applicant, to the support of Weber as claimed, for the known advantages of that feature, specifically, to extend the useful life of the biodegradable web or support. Likewise, it would have been obvious to incorporate an alternative equivalent hydrophobic resin such as urea-formaldehyde as claimed, as in the absence of any stated problems solved by or any advantage obtained by having an epichlorhydrin resin rather than urea-formaldehyde resin, further such modification is merely an alternate equivalent hydrophobic resin performing the same intended function of delaying the degradation of the fibrous mass.

Furthermore, one skilled in the art could have combined the elements claimed by known methods with no change in their respective functions (stable binder), and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Francis T. Palo whose telephone number is 571-272-6907. The examiner can normally be reached on M-Tu.,Th.-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Francis T. Palo*

Francis T. Palo  
Primary Examiner  
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